

National 4 Homework 26

Questions 1, 3, 4 and 5 are Non Calculator

1. Calculate

(a) 40% of £835

(b) $6.74 - 2.9 + 4.38$

(c) $36 + 12 \div 6 - 2$

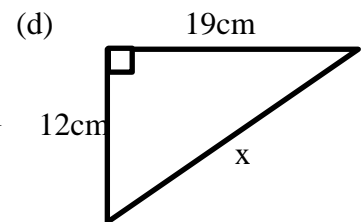
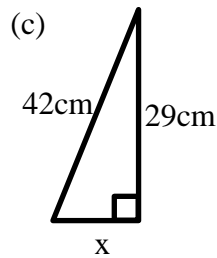
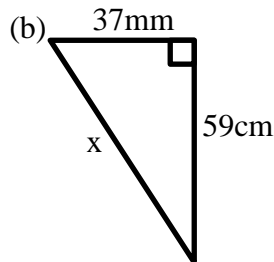
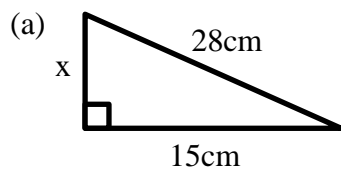
(d) 8.69×70

(e) $\frac{7}{9}$ of 603

(f) $0.574 \div 7$

(g) $5 \times 3\frac{1}{4}$

2. Calculate the length of the sides marked x.



3. Solve for x.

(a) $3(2x - 1) = 51$

(b) $4p + 5 < 33$

(c) $8x - 3 = 4x + 45$

4. Change the subject of the formula to the letter shown in brackets [].

(a) $P = IV$ [V]

(b) $v = u + at$ [a]

(c) $M = \frac{F}{A}$ [F]

(d) $g = p - h$ [h]

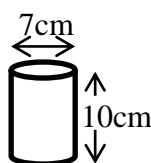
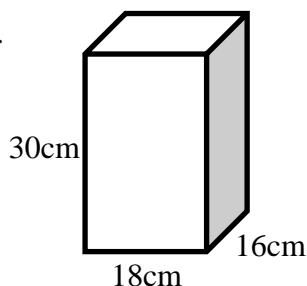
5. (a) Draw a coordinate grid from 0-10 on both the x and y axes.

Plot the points (0,3), (1,5), (2,7) and (3,9) and join them up with a ruler to form a straight line.

(b) Calculate the gradient of the straight line and write down the point where the graph crosses the y-axis.

(c) Use your answers from (b) to write down the equation of the straight line.

6.



A block of wax in the shape of a cuboid has dimensions as shown.

The wax is melted and poured into cylindrical moulds with diameter 7cm and height 10cm to make candles.

(a) Calculate the volume of wax in the cuboid.

(b) Calculate the volume of wax in each candle.

(c) How many candles can be made?